

I claim:

1. A transceiver, comprising:

a transmitting branch;

a receiving branch;

a duplex unit connected to said transmitting branch, to said receiving branch and to be connected to an antenna, said duplex unit separating said transmitting branch from said receiving branch;

a first mixer having an output and an input connected to said receiving branch;

a first local oscillator connected to said first mixer;

a receiving intermediate-frequency path connected to said output of said first mixer, said receiving intermediate-frequency path having an intermediate-frequency in a range of 0 to 0.5 megahertz;

a second mixer having an input and an output connected to said transmitting branch;

a transmitting intermediate-frequency path connected to said input of said second mixer, said transmitting intermediate-frequency path having an intermediate-frequency in a range of 180 megahertz to 200 megahertz; and

a second local oscillator connected to said second mixer.

2. The transceiver according to claim 1, wherein the intermediate frequency of said transmitting intermediate-frequency path is selected from the group consisting of 180 megahertz, 185 megahertz, 189.6 megahertz, 189.8 megahertz, 190 megahertz, 190.2 megahertz, 190.4 megahertz, 195 megahertz and 200 megahertz.

3. The transceiver according to claim 1, wherein said second mixer is connected to said first local oscillator.

4. The transceiver according to claim 1, including a changover switch connected to said first local oscillator, to said second local oscillator and to said second mixer.

5. The transceiver according to claim 1, including:

a third mixer connected to said second mixer;

a digital-to-analog converter connected to said third mixer;  
and

a third local oscillator connected to said third mixer.

6. The transceiver according to claim 5, wherein said first local oscillator, said second local oscillator and said third local oscillator in each case have a voltage-controlled oscillator and a phase-locked loop.

7. The transceiver according to claim 1, including:

a first baseband unit connected to said receiving intermediate-frequency path and having a digital mixer which can be detuned in steps of 200 kilohertz; and

a second baseband unit connected to said transmitting intermediate-frequency path and having a digital mixer which can be detuned in steps of 200 kilohertz.

8. The transceiver according to claim 1, wherein the transceiver is a universal mobile telecommunications system transceiver, and said duplex unit has a frequency splitter and a switch connected to said frequency splitter.